WHAT IS CLAIMED IS:

1. A network system that forms a part of a network, comprising:

a source computer, having a link to the network;

a destination computer, having a link to the network;

a satellite interface between the source computer and the destination computer, wherein information passes from the source computer to the destination computer;

means in the destination computer for requesting information from the source computer over the network;

means for receiving an information packet sent from the source computer in response to the request and for sending the information packet to the destination computer over the satellite interface; and

means for sending an ACK message to the source computer in response to receipt of the information packet, wherein the ACK message appears to the source computer to have come from the destination computer.

2. The network of claim 1, further comprising means for receiving a packet containing an ACK message from the destination computer, for indicating receipt of the information packet by the destination computer, and for discarding the ACK message received from the destination computer when no other data is present in the received packet.

3. The network of claim 1, further comprising means for receiving a packet containing an ACK message from the destination computer, for indicating receipt of the information packet by the

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destination computer, and for editing the ACK message and passing the received packet to the source computer.

4. The network of claim 3, wherein the editing means includes means for editing an ACK number of the received packet and for adjusting a checksum of the received packet in accordance with the edited value.

5. The network of claim 1, wherein the information packet is formatted in accordance with TCP/IP protocol.

6. The network of claim 1, wherein the ACK message is formatted in accordance with TCP/IP protocol.

7. The network of claim 1, wherein the satellite interface is a one-way interface.

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8. A gateway in a network system that forms a part of a TCP/IP network, wherein the network includes a source computer having a link to the TCP/IP network and a link to a high speed satellite interface, and a destination computer having a link to the TCP/IP network and a link to the high speed satellite interface, the gateway comprising:

means for receiving an information packet sent from the source computer and for sending the information packet to the destination computer over the satellite interface; and

means for sending an ACK message to the source computer in response to receipt of the information packet, wherein the ACK message appears to the source computer to have come from the destination computer.

9. The gateway of claim 8, further comprising means for receiving a packet containing an ACK message from the destination computer, for indicating receipt of the information packet by the destination computer, and for discarding the ACK message from the destination computer when no other data is present in the received packet.

10. The gateway of claim 8, further comprising means for receiving a packet containing an ACK message from the destination computer, for indicating receipt of the information packet by the destination computer, and for editing the ACK message and passing the received packet to the source computer.

11. The gateway of claim 10, wherein the editing means includes means for editing an ACK number of the received packet and

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for adjusting a checksum of the received packet in accordance with the edited value.

12. The gateway of claim 8, wherein the information packet is formatted in accordance with TCP/IP protocol.

13. The gateway of claim 8, wherein the ACK message is formatted in accordance with TCP/IP protocol.

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14. A method for sending information over a high speed satellite interface in a network system that forms a part of a TCP/IP network, wherein the network includes gateway and a source computer, having a link to the TCP/IP network, a destination computer, having a link to the TCP/IP network, and a satellite interface between the source computer, the gateway, and the destination computer, wherein information passes from the source computer to the destination computer, the method comprising the steps, performed by a processor of the gateway, of:

receiving an information packet sent from the source computer;

sending the information packet to the destination computer over the satellite interface; and

sending an ACK message to the source computer in response to receipt of the information packet, wherein the ACK message appears to the source computer to have come from the destination computer.

15. The method of claim 14, further comprising the steps of receiving a packet containing an ACK message from the destination computer, wherein the ACK message indicates receipt of the information packet by the destination computer and discarding the ACK message from the destination computer when no other data is present in the received packet.

16. The method of claim 14, further comprising the steps of receiving a packet containing an ACK message from the destination computer, wherein the ACK message indicates receipt of the information packet by the destination computer, and editing the

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ACK message and passing the received packet to the source computer.

17. The method of claim 16, wherein the editing step includes the substeps of editing an ACK number of the received packet and adjusting a checksum of the received packet in accordance with the edited value.

18. The method of claim 14, wherein the information packet is formatted in accordance with TCP/IP protocol.

19. The method of claim 14, wherein the ACK message is formatted in accordance with TCP/IP protocol.

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